REMARKS

Concurrent with the Request for Continued Examination, the Applicant hereby submits the responds to the Advisory Office Action, which was mailed on June 2, 2004. The Advisory Office Action indicated that Applicant's amendment after final was entered. Accordingly, the enclosed amendment reflects the changes made in that amendment.

In the Advisory Office Action, the Examiner indicates that the Applicant's amendment to claim 1, in which the formed polymeric layer was specified to have a thickness "at least equal to .04 μm", is not supported by the specification. The Examiner's rationale is that Figure 9 depicts and upper end .6 μm for the polymeric layer, whereas the limitation "at least equal to .04 μm" is open ended and not supportable. In response, the Applicant has amended claim 1 to specify that polymeric material layer has a thickness between approximately .04 μm and .6 μm.

The examiner further objects that the disclosure does not support the scope of claim 1 because the claim specifies "a polymeric material", whereas Figure 9 only provides data for three specific polymers. The Applicant disagrees. A patent applicant is not obligated to support each claim limitation with an exhaustive list of alternatives. A single disclosed embodiment is sufficient to support a claim for purposes of 35 U.S.C. §112. In this case, the Applicant describes more than one embodiment. Therefore, the Applicant respectfully submits that claim 1 is supported by the specification.

Finally, the Applicant wishes to respond to the Examiner's assertion that the polymer layer of Adair is disclosed as having a thickness from .1 μm to 100 μm. The Examiner's assertion is based on column 4, lines 45-54 of Adair, which provides "a vertical surface tends to limit itself to a relatively thin layer of .1 μm or less, depending on the size of the diamond

particles, while a horizontal surface may attain a relatively thick layer up to 100 μm in depth." This entire passage relates to the diamond seed layer, not a polymeric layer.

Adair discloses a chemical vapor deposition technique in which a silicon wafer is first treated with cations or positively charged cationic polymers (Col. 3, lines 60-64). Adair provides no guidance as to the specific thickness of the polymer added to the wafer surface. The only guidance provided is that "for a silicon wafer, a solution of 1 to 10 volume percent of polyethyleneimine in water is prepared and the wafer allowed to soak for approximately two minutes or more, followed by a rinse of deionized water." (col. 4, lines 17-20). Thus, Adair does not provide a polymer layer of a specific thickness but instead only provides a methodology for producing a polymer layer. As the Applicant established in the response of November 20, 2003, utilizing a technical reference entitled "Structural Studies Polymer-Cushioned Lipid Bilayers", a polymer film created in accordance with the method of Adair would have a thickness of approximately .004 μm, which is much less than .04 μm.

The Examiner responded, in the Office Action of January 7, 2004, that the Applicant was trying to "pull data or conclusions from another unrelated reference to dispute valid patent reference to overcome that patent reference." This was not the Applicant's intention. The Applicant was trying to explain that the method for forming the polymer layer would inherently only produce a polymer layer of .004 μm.

In the Advisory Action, the Examiner now asserts that the diamond seed layer of Adair is the same as the polymer layer. The formation of the polymer layer, however, is described in column 3, line 54 - column 4, line 20. The formation of the diamond seed layer is described in column 4, lines 20-54. The Examiner cites a passage (i.e., column 4, lines 45-54) that is take directly from the description of the formation of the diamond seed layer. The Examiner also

ignores that one sentence before the Examiner's citation is the language proving that the .1 μm to 100 μm language refers to the diamond seed layer, not the polymer layer. The entire passage reads "The thickness of the seed layer is a function of the orientation of the substrate during exposure. A vertical surface tends to limit itself to a relatively thin layer of .1μm or less, depending on the size of the diamond particles, while the horizontal surface may attain a relatively thick layer up to 100μm in depth." (Col. 4, lines 44-54).

This distinction between the diamond seed layer and the polymer layer is significant because the Applicant claims "forming a layer containing a polymeric material, wherein the layer has a thickness between approximately .04 μm and .6 μm" and "packing particles in a polymeric material by contacting the layer with a particle suspension." Adair does not disclose packing particles in a polymeric material fact, the thickness of the polymeric material described in Adair precludes the packing of the particles into that layer. Further, the context of Adair makes clear that the diamond seed layer adheres to the surface of the polymer layer and is not packed within. (See, e.g., col. 3, lines 56-58).

In view of the aforesaid, Applicant respectfully submits that present application is in condition for allowance. Favorable reconsideration is respectfully requested.

Respectfully Submitted,

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